



BRAIDWOOD STATION UPDATED FINAL SAFETY ANALYSIS REPORT

FIGURE 2.5-123

LOG OF BORING A-1
(SHEET 1 OF 4)

DEPTH (FEET)	OTHER TESTS	SHEAR STRENGTH PSF	ATTERBERG LIMITS			FIELD MOISTURE CONTENT %	DRY DENSITY PCF	WATER LOSS (LUGGONS)	PERCENT RECOVERED	ROD
			LIQUID LIMIT %	PLASTIC LIMIT %	PLASTICITY INDEX %					
75										
80									100	55
85										
90									83	70
95										
100									93	76
105										
110									100	71
115										
120									100	100
125										
130									100	95
135										
140									100	97
145										
150									100	100

BORING A-1 CONTINUED

ELEVATION
(FEET)
—520

SYMBOLS

DESCRIPTIONS

	45° FRACTURE AT 78.8 FEET	—515
	GRADES CARBONACEOUS AT 80.5 FEET	
	BLACK COAL; THIN BEDDED; NUMEROUS TIGHT VERTICAL FRACTURES WITH SOME PYRITE AND CLAY	—510
	DARK GRAY CLAYEY SHALE, CARBONACEOUS; HIGHLY FRAGMENTED WITH NUMEROUS RANDOM SLICKENSIDES	
	GRADES LIGHT GRAY, NONCARBONACEOUS AT 87.0 FEET (SPOON FORMATION)	—505
	GRADES TO DARK GRAY CARBONACEOUS SHALE BELOW 91.8 FEET	
	LIGHT GREENISH-GRAY FINE SANDY SILTSTONE, MICACEOUS, THINLY LAMINATED	—500
	BLACK CLAYEY SHALE, CARBONACEOUS, HIGHLY FRAGMENTED WITH RANDOM SLICKENSIDES	—495
	GRAY SILTY SHALE, FINELY MICACEOUS; BRITTLE; NUMEROUS SLICKENSIDES ALONG RANDOM PLANES OF WEAKNESS AT 106.0 FEET	—490
	45° FRACTURES SPACED APPROXIMATELY 12 INCHES BELOW 103.7 FEET WITH SLICKENSIDES	
	GRADES CARBONACEOUS BELOW 106.0 FEET	
	MOTTLED BROWNISH-RED AND GRAYISH-GREEN SHALE; INDISTINCT BEDDING; HIGHLY FRACTURED AND FRAGMENTED, NUMEROUS RANDOM SLICKENSIDES; SCATTERED OOLITIC GRANULES IN ZONES	—485
	GREENISH-GRAY DOLOMITIC SHALE; THINLY LAMINATED; OCCASIONAL MARINE FOSSIL; NEAR VERTICAL FRACTURE 114.1 TO 114.7 FEET (BRAINARD FORMATION)	—480
		—475
	GRADES CALCAREOUS AT 123.4 FEET	—470
	GRAY SILTY LIMESTONE, FINE TO MEDIUM CRYSTALLINE; INTERBEDDED WITH IRREGULAR STRINGERS AND GRADATIONAL ZONES OF CALCAREOUS SHALE 1/4 TO 2 INCHES THICK, SPACED 1/2 TO 5 INCHES; HIGHLY FOSSILIFEROUS	—465
	1/4 TO 1/2 INCH OIL FILLED VUGS, SPACED 1 TO 2 INCHES FROM 127.5 TO 128.2 FEET	
	2 INCH OPEN VUG WITH CALCITE CRYSTALS AT 129.7 FEET	
	(FORT ATKINSON FORMATION)	—460
		—455
		—450
	LIGHT GRAY LIMESTONE, COARSELY CALCARENITIC, FOSSILIFEROUS; THIN TO MEDIUM BEDDED, FINE IRREGULAR SHALE PARTINGS CONCENTRATED IN 2 TO 4 INCH ZONES SPACED 2 TO 8 INCHES	—445

BORING CONTINUED

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FIGURE 2.5-123

LOG OF BORING A-1
(SHEET 2 OF 4)

DEPTH (FEET)	OTHER TESTS	SHEAR STRENGTH PSF	ATTERBERG LIMITS			FIELD MOISTURE CONTENT %	DRY DENSITY PCF	WATER LOSS (LUGGONS)	PERCENT RECOVERED	RQD
			LIQUID LIMIT %	PLASTIC LIMIT %	PLASTICITY INDEX %					
150										
155										
160									100	97
165										
170									98	95
175										
180									92	88
185										
190									100	97
195										
200									96	90
205										
210									100	95
215										
220									100	100
225										

BORING A-1 CONTINUED

ELEVATION
(FEET)
—445

SYMBOLS

DESCRIPTIONS

1/8 TO 1 INCH OIL FILLED VUGS SPACED 1 TO 6 INCHES
WITH NUMEROUS SMALLER OPENINGS FROM 151.2 TO 152.5 FEET

—440

LIGHT BUFF TO WHITE, LIMESTONE, PURE, COARSELY CALCARENITIC,
FOSSILIFEROUS; HAIR LINE SHALE PARTINGS AND STYOLITES
SPACED 1 TO 12 INCHES

—435

DARK GRAY CALCAREOUS SILTSTONE; HIGHLY FOSSILIFEROUS;
LAMINATED WITH NUMEROUS WHITE IRREGULAR FOSSIL BANDS;
INTERBEDDED 1/4 TO 1 INCH GRADATIONAL ZONES OF SILTY
LIMESTONE

—430

GRADES LESS FOSSILIFEROUS BELOW 168.2 FEET
(SCALES FORMATION)

—425

DARK GRAY SILTY SHALE, DOLOMITIC; THINLY LAMINATED,
INTERBEDDED 1 TO 4 INCH LAYERS OF LIGHT GRAY SILTY AND
FOSSILIFEROUS LIMESTONE SPACED 3 TO 18 INCHES

—420

—415

GRADING TO 4 TO 20 INCH ZONES OF LIGHT GRAY SILTY
LIMESTONE SPACED 20 TO 48 INCHES; FOSSILIFEROUS

—410

—405

45° FRACTURE WITH SLICKENSIDES AT 194.0 FEET

—400

45° FRACTURE WITH SLICKENSIDES AT 195.6 FEET
THICK LIMESTONE BEDS GRADING OUT; INTERBEDDED
2 TO 6 INCH CALCAREOUS ZONES SPACED 1 TO 2 1/2 FEET

—395

—390

45° FRACTURES 206.8 TO 207.3 FEET

NEAR VERTICAL FRACTURE 208.0 TO 208.5 FEET

—385

—380

—375

CALCAREOUS ZONES GRADING 1 TO 3 INCHES THICK
SPACED 1 1/2 TO 5 FEET

—370

BORING CONTINUED

BRAIDWOOD STATION UPDATED FINAL SAFETY ANALYSIS REPORT

FIGURE 2.5-123

LOG OF BORING A-1
(SHEET 3 OF 4)

BORING A-1 CONTINUED

DEPTH (FEET)	OTHER TESTS	SHEAR STRENGTH PSF	ATTERBERG LIMITS			FIELD MOISTURE CONTENT %	DRY DENSITY PCF	WATER LOSS (LUGEONS)	PERCENT RECOVERED	RQD
			LIQUID LIMIT %	PLASTIC LIMIT %	PLASTICITY INDEX %					
225										
230									100	100
235										
240									98	97
245										
250									100	100
255										
260									100	100
265										
270									100	100
275										
280										

SYMBOLS

DESCRIPTIONS



MOTTLED LIGHT GRAY TO BUFF DOLOMITIC LIMESTONE; FINE TO MEDIUM CRYSTALLINE; THIN BEDDED, NUMEROUS WAVY HAIRLINE SHALE PARTINGS SPACED 1/4 TO 6 INCHES THROUGHOUT; UPPER CONTACT WITH NUMEROUS 1 TO 2 INCH VOIDS WHICH HAVE BEEN FILLED BY OVERLYING DEPOSITS, WELL INDURATED, TIGHT
(WISE LAKE - DUNLEITH FORMATIONS)

60° FRACTURE 273.3 TO 273.7 FEET WITH DRUSY CRYSTALLINE SURFACE

BORING COMPLETED AT 276.0 FEET
ON 9-30-72
CASING INSTALLED TO DEPTH OF 45 FEET
WATER LEVEL MEASURED AT ELEVATION 580.0 FEET
ON 10-10-72
300 POUND HAMMER FALLING 18 INCHES

ELEVATION
(FEET)

—370

—365

—360

—355

—350

—345

—340

—335

—330

—325

—320

—315

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FIGURE 2.5-123

LOG OF BORING A-1
(SHEET 4 OF 4)